

**Cover Story 封面故事**

## EPC/RFID Tracks Exports from Pearl River Delta to Germany

### EPC/RFID技術追蹤珠三角出口至德國之貨件



- 06 Helping SMEs to Manage Inventory Better  
幫助中小型企業加強倉存管理
- 11 Asian Movement Gets Under Way  
to Bring EPC/RFID Standard to Consumer Electronics  
亞洲區展開行動  
引入EPC/RFID技術至電子消費品
- 14 Thinking Big with Reduced Space Symbolism Bar Codes  
嶄新縮減空間碼內含乾坤
- 17 Supply Chain Maturity Reference Model Tailors  
SCM Best Practice for SMEs  
供應鏈成熟水平參考模型 為中小企度身訂造

# Contents<sup>目錄</sup>

Issue 3 January 2007  
第三期 2007年1月

## Cover Story

### 封面故事

- P03 EPC/RFID Tracks Exports from Pearl River Delta to Germany  
EPC/RFID技術追蹤珠三角出口至德國之貨件

## Industry Watch

### 行業焦點

- P06 Helping SMEs to Manage Inventory Better  
幫助中小型企業加強倉存管理

## EPC In Action

### EPC追蹤

- P11 Asian Movement Gets Under Way to Bring EPC/RFID Standard to Consumer Electronics  
亞洲區展開行動  
引入EPC/RFID技術至電子消費品

## Worldwide Trends

### 環球動態

- P14 Thinking Big with Reduced Space Symbology Bar Codes  
嶄新縮減空間碼內含乾坤

## SCM Best Practice

### 供應鏈管理最佳實務

- P17 Supply Chain Maturity Reference Model Tailors SCM Best Practice for SMEs  
供應鏈成熟水平參考模型 為中小企度身訂造

## Events & Training Programs

### 活動及培訓課程

- P21

## Complimentary Member Listing

### 會員名錄

- P23

## Publisher :

GS1 Hong Kong  
22/F, OTB Building,  
160 Gloucester Road,  
Wanchai, Hong Kong.  
Tel : (852) 2861 2819  
Fax : (852) 2861 2423  
Email : info@gs1hk.org  
Website : http://www.gs1hk.org

## 出品人 :

香港貨品編碼協會  
香港灣仔告士打道160號  
海外信託銀行大廈22樓  
電話 : (852) 2861 2819  
傳真 : (852) 2861 2423  
電子郵件 : info@gs1hk.org  
網址 : http://www.gs1hk.org

## Dedicated Hotlines 專用熱線 :

Article Numbering and Barcoding services  
貨品編碼及條碼服務  
(852) 2861 2819 / 2863 9788

EZ\*TRADE service  
通商易服務  
(852) 2863 9799

HK e-ID Registry service  
香港e-ID登記處服務  
(852) 2863 9772

Global Data Synchronization service  
全球數據同步服務  
(852) 2863 9771

Electronic Product Code service  
產品電子代碼服務  
(852) 2861 2819

GS1 Hong Kong SCM Knowledge Centre  
香港貨品編碼協會供應鏈管理資源中心  
(852) 2861 2819

Vendor Alliance Program  
供應商夥伴計劃  
(852) 2863 9723

版權所有 · 不得翻印 2007年1月

Copyright©January 2007

by GS1 Hong Kong

All rights reserved.

No part of this material may be reproduced or distributed in any form or by any means, or stored in a database or retrieval system, without prior written permission from GS1 Hong Kong. Elements of this publication may be copied on condition the source is acknowledged.

# EPC/RFID Tracks Exports from Pearl River Delta to Germany

## EPC/RFID技術追蹤珠三角出口至德國之貨件



**EPCglobal Hong Kong, Hong Kong-based logistics operator Fat Kee Stevedores Limited and the METRO Group recently started the first successful end-to-end use of EPC/RFID tags in the international supply chain from the Pearl River Delta (PRD) to Germany. This innovative technology enables a more efficient and transparent flow of goods – all the way from the PRD consolidation centre, to the distribution centre of the METRO Group in Unna, Germany.**

The Pan Pearl River Delta (PPRD) is one of the world's principal manufacturing centres, accounting for 40% of China's GDP. There are some 80,000 factories in Guangdong, China set up by Hong Kong entrepreneurs. In 2004, the PRD alone accounted for more than 30% of China's total exports. Emerging technology such as EPC/RFID, which provides tracking and visibility of cargo in transit, can have a major effect on the efficiency and transparency of the supply chain. For this reason, the rapid development and adoption of EPC/RFID is a matter of strategic importance to the manufacturing base.

In October 2006, the METRO Group, one of the most important international retailers, initiated the Advanced Logistics Asia (ALA) project. The aim is to demonstrate how EPC/RFID technology can optimize goods flows on an international scale. As a consolidator, Fat Kee bundles cargo from PRD manufacturers and prepares them for shipping to global retailers such as the METRO Group. In the ALA project, Fat Kee attaches passive EPC/RFID transponders based on the Generation 2 standard to selected shipments, programs them with tag printing equipment, and uses EPC compliant fixed readers to upload data to the Hong Kong EPC network. The MGB METRO Group Buying Hong Kong (MGB) contributes its supply chain expertise to manage the entire process.

**The rapid development and adoption of EPC/RFID is a matter of strategic importance.**

**加速發展及採用EPC/RFID技術已成為一項重要策略。**

EPCglobal香港與香港集裝商發記運輸有限公司及麥德龍集團(METRO Group)最近首次成功使用產品電子代碼／無線射頻識別(EPC/RFID)標籤，點對點追蹤從珠三角至德國的國際供應鏈之物流。這項創新技術的應用大大提高了發記運輸於珠三角的集裝中心至麥德龍集團位於德國烏恩納的配送中心整個物流程序的透明度。

泛珠三角是全球其中最主要的生產中心之一，其產量佔中國國內生產總值的百分之四十。目前在廣東省便有八萬家工廠由香港企業家所經營。於2004年，僅是來自泛珠三角的生產量便佔中國總出口的百分之三十。只要採納EPC/RFID這項新興技術來追蹤貨物和透視貨品資料，供應鏈的效率及透明度便可以大大提高。因此，加速發展及採用EPC/RFID技術已成為泛珠三角生產基地的企業的一項重要策略。

全球其中一家最重要的連鎖零售商麥德龍集團於2006年10月啟動了「亞洲先進物流」(簡稱ALA)計劃，目的是要引證EPC/RFID技術如何優化國際供應鏈的貨物運輸程序。發記運輸作為集裝商，負責將泛珠三角製造商的貨物集中一起處理，然後再運送給麥德龍集團等的全球大型零售商。在ALA計劃中，發記運輸負責於指定付運船貨的紙板貨箱貼上第二代標準的被動式EPC/RFID標籤，然後利用標籤打印機將標籤上資料程式化，再運用符合EPC標準的閱讀器將數據上載至香港EPC網絡。麥德龍集團採購部(香港)(MGB)的供應鏈專家亦參與監督整個過程。

後再運送給麥德龍集團等的全球大型零售商。在ALA計劃中，發記運輸負責於指定付運船貨的紙板貨箱貼上第二代標準的被動式EPC/RFID標籤，然後利用標籤打印機將標籤上資料程式化，再運用符合EPC標準的閱讀器將數據上載至香港EPC網絡。麥德龍集團採購部(香港)(MGB)的供應鏈專家亦參與監督整個過程。



## EPCglobal Hong Kong's EPC industry solution

The ALA project was the first to benefit from EPCglobal Hong Kong's EPC industry solution. EPCglobal Hong Kong provided Fat Kee with a turnkey EPC/RFID system which includes EPC/RFID technology knowledge transfer, business process review, equipment, training, advisory services and consultancy, such as recommendations on EPC/RFID solution requirements, sourcing support and use of the Hong Kong EPCnetwork. The system was installed at Fat Kee's consolidation centre in Hong Kong as a trial and then relocated to the company's Yantian Port consolidation centre.

"The ALA project is an excellent model for the local logistics industry. It demonstrates how a local logistics firm can collaborate with an international retailer like METRO to enable efficient global supply chain tracking by adopting global standards such as EPC/RFID," said Anna Lin, Chief Executive of GS1 Hong Kong and EPCglobal Hong Kong. "By demonstrating the successful use of such standards based technology in the supply chain from the PRD to Europe, we are paving the way for more companies from different sectors to implement the global standards and experience the associated benefits that provide efficient supply chain tracking and visibility throughout global trade."

The Hong Kong EPCnetwork also handles the real-time shipment data. Such data is read by automatic identification devices (readers) and uploaded to the network. Once uploaded, this real-time information is immediately available to all parties involved. The project therefore represents a model for future PRD trade flows, monitored by EPC/RFID tags using globally accepted EPC identifiers and yielding real-time information available to all trade partners.

Commenting on the success of the trial, Mr. David Kong, Managing Director of Fat Kee said, "We are honoured to be part of the team in the Advanced Logistics Asia initiative. By using this advanced RFID technology, supply chain visibility is increased significantly." Mr. Kong further elaborated, "With this implementation, we are seeing substantial benefits to our customers, gaining information which was previous not possible without this RFID technology. We believe this project, which combines RFID usage and the Internet, will revolutionize supply chain management."



## The Hong Kong EPCnetwork

The Hong Kong EPCnetwork was launched in 2005 and its purpose is to create end-to-end supply chain information visibility by enabling manufacturers, logistics providers and global retailers to track and trace supply chain information about their cargo goods flow by using EPC/RFID technology.

The numbering standard used to program the passive tags for Fat Kee, assigned by EPCglobal Hong Kong, is another key part

## EPCglobal香港提供EPC業界方案

ALA計劃是首個受惠於EPCglobal香港的EPC業界解決方案的項目。在這計劃中，EPCglobal香港為發記運輸提供完備的EPC/RFID配套系統，這系統包括EPC/RFID技術知識轉移、業務程序檢討、設備、培訓、諮詢和顧問服務，當中包括就EPC/RFID技術方案的要求、資源搜尋支援以及如何使用香港EPC網絡等範疇提供建議。該EPC/RFID配套系統首先於發記運輸之香港的集裝中心進行測試，然後再被遷往發記運輸位於鹽田港的集裝中心。

香港貨品編碼協會暨EPCglobal香港總監林潔貽女士表示：「ALA計劃為本地物流業提供了優良的典範，引證本地物流公司如何與麥德龍集團等國際大型零售商合作，共同採納EPC/RFID全球技術標準來實現高效的全球供應鏈貨物追蹤。」林女士稱：「這次成功地在泛珠三角至歐洲的供應鏈採用標準化技術，我們正好為不同業界邁向實施全球供應鏈標準作好準備，讓各界體會高效供應鏈追蹤及高透明度為全球貿易帶來的益處。」

香港EPC網絡可以即時處理船運數據。當這些數據被自動識別設備(閱讀器)讀取後便隨即上載至網絡中，數據一經上載後，各相關貿易夥伴便能獲取實時的相關資料。因此，ALA計劃正

好展示泛珠三角未來貿易流的模式 - 利用印有全球認可的EPC識別碼的EPC/RFID標籤監控物流程序，為所有相關貿易夥伴提供實時的貨運資料。

發記運輸有限公司董事長江卓崙就這次的成功試驗表示：「我們很榮幸能夠參與ALA計劃。RFID技術在物流方面的應用，大大提高了供應鏈的透明度。」江先生稱：「我們

有機會參與實行了這項計劃之後，發現採用RFID技術確能為客戶帶來很多益處，讓他們得到所需的有關物流資料更為全面。我們相信這項結合RFID應用技術及互聯網的計劃，將會革新供應鏈管理。」

## 香港EPC網絡

香港EPC網絡於2005年推出，目的是要提供點對點供應鏈資料透明度，讓製造商、物流服務供應商及全球零售商能夠利用EPC/RFID技術追蹤付運中貨物的供應鏈資料。

由EPCglobal香港簽發之編碼標準，亦是麥德龍集團ALA計劃的其中重要一環，那些程式化的編碼標準被裝載於被動式

of this project. In METRO Group's initiative Advanced Logistics Asia, the tags contain GS1 Serial Shipping Container Code (SSCC). Such code will be captured by EPC readers and uploaded to the network, which lets Fat Kee and MGB access database information about the contents of the cartons such as stock keeping units, quantity, shipment information, weight, volume and location of goods. Initial results of tag reading are very impressive, with the success read rate of data capture up to 99%, according to the METRO Group.

When EPC/RFID technology is used routinely, EPC/RFID tags will be applied not only by consolidators, but by individual manufacturers that load full containers.



標籤上，由EPCglobal香港分配給發記運輸貼於貨箱上。這些標籤均印有GS1貨運容器序碼 (Serial Shipping Container Code - SSCC)，序碼內的資料先由EPC閱讀器讀取後再上載至網絡，讓發記運輸及MGB可以從數據庫中取得存貨單位、貨物數量、付運資料、重量、容積及貨物位置等貨物資料。麥德龍集團表示，讀取標籤的初始成效非常理想，成功的數據讀取率達百分之九十九。

當EPC/RFID技術日後被廣泛地應用，我們相信不單是集裝商，而需採用整個貨櫃付運的製造商亦會同時受惠。

## Automatic shipment order reconciliation

Before loading tagged cartons into containers, the tag data are reconciled with the purchase orders. Previously, warehouse workers had to check each shipment individually, a lengthy procedure that may lead to errors. EPC/RFID technology enables automatic reconciliation of each consignment, without having to check each carton with line-of-sight barcode readers.

Fat Kee ships the consignments first to Rotterdam in the Netherlands, then to the METRO Group distribution centre in Unna, Germany, where the tags are read again. Reading at the receiving port instantly reveals whether the incoming goods match the previously advised shipment details. The goods are then available for distribution to the stores of METRO Group.

Fat Kee's customer was well satisfied. "EPC/RFID technology gives us complete visibility on consignments, their content and their location, at every stage in the supply chain, right into our own distribution centre," said Dr. Gerd Wolfram, Managing Director of MGI METRO Group Information Technology. "We can reconcile shipped goods with purchase orders in real time; moreover the handling time for incoming goods is shortened significantly."

EPCglobal Hong Kong is set to accelerate EPC implementation in both Hong Kong and the Pearl River Delta region. We are leading the drive to make EPC/RFID technology the tool for the next generation of supply chain management solutions.



## 自動核實付運單據

貼上了標籤的貨箱被裝入貨櫃之前，貨倉工作人員必須核對貨箱標籤上的資料是否與採購訂單的一致，以確保所付運的貨物準確無誤。以往工作人員需逐次檢查每批船運貨物的單據，這過程冗長，容易導致出錯。利用EPC/RFID技術則可以進行自動校對每批運送貨物的程序，省卻利用人手操控條碼閱讀器檢查每個貨箱的程序。

經由發記運輸處理的貨物，首先會被運送至荷蘭的鹿特丹港，然後再轉運至麥德龍集團位於德國烏恩納的配送中心，這些貼有RFID標籤的貨物在這裏將會再被閱讀器讀取標籤上的資料。於收貨港口再次讀取貨物的資料，可確保所收之貨物是與之前所取得的付運資料相符。在核實了貨物資料之後，這些貨物便可隨時被分發至麥德龍集團的零售店銷售。

發記運輸的客戶相當滿意這計劃的成果。麥德龍集團信息科技董事總經理Gerd Wolfram博士表示：「利用EPC/RFID技術可讓我們對所付運貨物的透明度，包括貨物種類、位置，以及於供應鏈的每個程序，直至抵達我們的配送中心，這期間的所有資料，都可以一目了然。」Wolfram稱：「我們可以實時的核對付運貨物與採購訂單所列的是否一致；除此之外，處理進口貨件的時間亦較以往大為減少。」

EPCglobal香港一向致力在香港及珠三角地區推廣採用EPC標準。我們現正全速推動EPC/RFID技術發展成為新一代的供應鏈管理解決方案的有效工具。

# Helping SMEs to Manage Inventory Better

## 幫助中小型企業加強倉存管理



SMEs face common problems in inventory management such as record inaccuracies, data discrepancies, accumulation of ageing and slow-moving items, inefficiencies arising from manual procedures and the lack of inventory management know-how. Moreover, they often lack the knowledge and resources to improve their operations.

GS1 Hong Kong is well positioned to help local SMEs in optimizing operational efficiency. Between 2002 and 2004, with support from the Hong Kong SAR Government's Trade and Industry Department, we successfully implemented our SME Ambassador Program for IT automation.

Building upon that success, in 2006, we launched the "SME Ambassador Program – Inventory Management" to help SMEs to improve inventory management. Five SMEs were selected from different industries and we subjected their inventory processes to a thorough professional analysis, covering the receipt of goods, storage, dispatch, returns, monitoring and management of inventory and warehouse supervision. The study also included the IT systems and the use of bar codes.

中小型企業經常面對的倉存管理問題，包括紀錄失準、資料不符、積壓過時或流量慢的貨品、人手作業欠效率及缺乏倉存管理技術，且一般欠缺改善營運的知識及資源。

香港貨品編碼協會一向致力協助本地的中小企優化營運效率。在2002至2004年間，我們獲香港特區政府工業貿易署的支持，成功推出關於資訊科技自動化的中小型企業大使計劃。

In 2006, GS1HK launched the "SME Ambassador Program – Inventory Management" to help SMEs to improve inventory management.

2006年推出一項以“倉存管理”為主題的中小型企業大使計劃，幫助中小企改善倉存管理。

我們憑藉過往推行中小型企業大使計劃的成功經驗，再接再勵於2006年推出一項以“倉存管理”為主題的中小型企業大使計劃，幫助中小企改善倉存管理。我們選出五家不同行業的中小企，為其倉存運作流程進行詳盡的專業分析，範圍包括收貨、貯貨、出貨、退貨、

倉存管理與監察，以及倉庫監控程序。研究亦包括資訊科技系統及條碼應用。



## Case 1: Tackling limited storage space 個案一：善用有限的儲存空間

**Company Background** 3-MED Medical Instruments Co. Ltd. supplies rehabilitation products, ranging from large items such as wheelchairs and crutches, down to diapers and oxygen breathing catheters, for the local market and export trade.

**Business Challenge** The inventory challenges faced by 3-MED included limited storage space for the extensive product range, with the same products being placed in multiple locations, leading to heavy reliance on human memory in warehousing practice and misplacing of small goods during delivery. Products such as diapers, catheters had expiry dates that needed strict stock control.

**Recommendations** GS1 Hong Kong recommended 3-MED to designate and clearly label functional zones for goods-in, goods-out, returned goods, waste, fire-safety passageways, transportation passageways and showrooms. We introduced uniform cartons for efficient stacking and established procedures for returned goods. A "First In, First Out" (FIFO) method of inventory placement was also recommended to manage goods with expiry dates, minimizing the chance of products becoming obsolete due to expiration. EPC based radio frequency identification technology could also improve goods tracking especially for high-value items.

**公司資料** 三星醫療器材有限公司（「三星」）為本地及海外市場提供復康產品，包括輪椅及杖等大型用品，以至紙尿褲及氧氣呼吸喉管等。

**業務挑戰** 三星在倉存方面所面對的挑戰，包括缺乏足夠的空間存放種類繁多的產品，同一種貨品被存放在不同的位置，以致日常倉務事宜亦多依靠人為記憶來處理，而又曾在運送時遺漏了細小的貨件。紙尿褲及導管等有使用期限的產品，亦需要嚴格的倉存監控程序。

**建議** 香港貨品編碼協會向三星建議，將倉庫清楚設定為不同區位，包括收貨區、出貨區、退貨區、廢貨區、安全走火通道、運貨通道及陳列室，並明確標示各貨區。我們建議三星使用劃一尺碼的紙板箱來方便堆疊貨物及制定退貨程序，亦建議採用「先進先出」(FIFO)的存貨擺放方法來處理有使用期限的貨品，以減少因過期而報廢貨品的機會。而採用產品電子代碼／無線射頻識別技術(EPC/RFID)，則可以改善貨品追蹤，尤其適用於高價貨品。



## Case 2: Bar coding paper products for food and beverage 個案二：為紙類餐飲產品編碼

**Company Background** Kwong Wah Paper Products (HK) Co. Ltd. manufactures a range of disposable products for the food and beverage industry, such as paper cups and plates.

**Business Challenge** The big range of colours, textures and sizes made it difficult for customers to order accurately. Products with expiry dates had proved troublesome to manage.

**Recommendations** GS1 Hong Kong recommended Kwong Wah should adopt Global Trade Item Number (GTIN). Each version of every product can have a unique identification number which can be marked with a bar code, and scanned into the IT database, improving the efficiency of inventory management and tracking products movements. RFID can also be considered for use with EPC numbers.

**公司資料** 光華紙業（香港）有限公司（「光華」）生產一系列即棄的紙類餐飲產品，包括紙杯、紙碟等。

**業務挑戰** 各式紙品包含不同顏色、質料、尺寸，令客戶在訂購時未必可以準確形容產品型號。亦並未為有使用期限的產品設立監控系統。

**建議** 香港貨品編碼協會建議光華採用國際貿易貨品編碼 (GTIN)，為每種貨品編配獨一無異的識別碼，GTIN又可轉為條碼印於產品上，再以條碼掃描器將產品資料載入公司的電腦數據庫內，改善倉存管理及貨品追蹤的效率。更建議採用產品電子代碼／無線射頻識別技術（EPC/RFID）來提高供應鏈管理效率。

為了配合「先進先出」的出貨流程，必須在被掃描至電腦數據庫的國際貿易貨品編碼中加印一個到期日條碼。



In order to support FIFO inventory turns, the expiry dates of products should be part of the item number that is scanned into the computer database.

## Case 3: Accurate ordering for volumes of garments 個案三：提高訂購成衣產品準確度

**Company Background** Delicron (HK) Ltd. is a vendor of clothing for men and children.

**Business Challenge** The large range of garments, sizes and colours has outgrown the inventory space and created problems with inconsistent bar coding and operational procedures.

**Recommendations** Delicron should streamline inventories by regular reviews and removal of the duplicated and slow-selling product lines. To avoid excessive stock, Delicron can adjust the Minimum Order Quantity with suppliers.

Delicron can also consider warehousing in China or outsourcing warehousing to cope with growing inventory. To manage the goods cycles, the company can integrate several warehouses into a centralized operation and use zoning.

Other recommendations included full use of bar code scanning and regular review of the efficiency of each bar code scanning point. For goods on retail consignment, Delicron can adopt electronic point-of-sales systems, where sales data can be captured by using bar code scanners and then loaded into the company's computer.

**公司資料** 得利龍百貨有限公司（「得利龍」）是男士及兒童成衣供應商。



**業務挑戰** 由於成衣類產品種類繁多，而且備有多種尺碼及顏色，令倉庫空間不足應付，並產生條碼不一致及運作程序上的問題。

**建議** 香港貨品編碼協會建議得利龍須精簡庫存管理流程，包括定期檢討並移走重覆及流量較慢的貨品。為避免積壓過多存貨，得利龍可與供貨商協議調節最少訂貨量。

得利龍亦可以考慮採用國內貨倉或將倉存工序外判，以解決存貨日益增多的問題。為應付不同的產品週期需要，得利龍更可整合數個倉庫成一個中央倉庫，並設定不同區位。

其他的建議包括全面使用條碼掃描程序，並定期檢討每個條碼掃描點的操作效率。對於寄賣的零售貨品，得利龍可以採用配備條碼掃描的電子銷售點系統來讀取銷售數據，然後下載至公司的電腦系統內。

## Case 4: Meeting the challenge of over-stocking 個案四：應付過量存貨的挑戰

**Company Background** Amytel Asia Ltd. is a specialist in wireless products such as cordless phones, walkie-talkies and Bluetooth technology items.

**Business Challenge** The company has a large range of products, and is running short of warehouse space. Consequently, products are not stored in consistent locations and staff memorize their location, resulting in errors.

Customers phone orders and mistakes in product descriptions mean wrong shipments. Returns procedures are unclear, causing inaccuracies in the inventory records.

**Recommendations** To avoid over-stocking, it was suggested that Amytel reduced order quantity by partial deliveries of bulk purchase orders. Slow-moving and ageing items should be eliminated from stock.

By applying Global Trade Item Number (GTIN) on all products, assigning an individual number for each product, size, colour, and packing quantity, Amytel could improve order placement accuracy. Inventory details can be shown on the IT system when the GTIN has been uploaded.



**公司資料** 奧美達（亞洲）有限公司專門經營無線產品，包括無線電話、對講機及藍芽等產品。

**業務挑戰** 奧美達（亞洲）有限公司所經營的貨品種類日益繁多，令倉庫空間不足應付，導致同一類貨品被分散存放在不同倉位，員工亦因此而要牢記存貨位置，當中難免出錯。

客戶經電話訂貨，未能清楚形容產品型號，引致錯誤付運。退貨流程亦不清晰，以致存貨紀錄失準。

**建議** 香港貨品編碼協會建議該公司要避免存貨過剩，可與客戶協商分批運送大宗購貨訂單的貨品。並須從存貨中移走流量較慢及長期積壓的貨品。

其他的建議包括對所有貨品採用國際貿易貨品編碼（GTIN），為每樣貨品編配一個獨一無異的識別碼，改善落單的準確性。當公司的電腦系統上載了產品的GTIN後，存貨資料便會被儲存在數據庫內。



## Case 5: Inventory control keeps soup packs fresh 個案五：倉存管理保持湯包新鮮

**Company Background** Cents Co. Ltd. is a supplier of almost 100 different packs containing the ingredients for making soups.

**Business Challenge** Inventory was becoming a problem, with individual types of pack being stored in more than one location. Returned products were not accurately recorded, so manually entered warehouse data was inaccurate.

**Recommendations** GS1 Hong Kong recommended designating warehouse zones and goods storage areas for goods in/out, storage, returned goods and waste goods with a buffer for excessive inventory. Other recommendations covered creation of procedures for handling returns.

Barcode scanners should be used to capture goods-in and goods-out records. GS1 Hong Kong also provided consultancy on technology and costs involved in adopting bar code scanners systems linked to the IT system.



**公司資料** 瑞益行有限公司（「瑞益行」）為近百個品種的袋裝湯料湯包的供應商。

**業務挑戰** 由於產品種類日益增多，倉存方面逐漸出現問題，同一款湯包被儲存在多於一個位置。公司亦沒有準確的退貨紀錄，依靠人手輸入的倉存數據亦與實際貨物庫存紀錄不符。

**建議** 香港貨品編碼協會建議瑞益行將倉庫劃分不同貨區及貨品儲存區，包括明確劃分和標示收/出貨區、存貨區、退貨區及廢貨區，並設置一個緩衝區擺放過剩存貨。其他建議包括制定退貨流程。

我們亦建議瑞益行須採用條碼掃描器讀取收貨及出貨紀錄，並可提供諮詢服務，就採用連接至資訊科技系統的條碼掃描器的技術及成本提供意見。

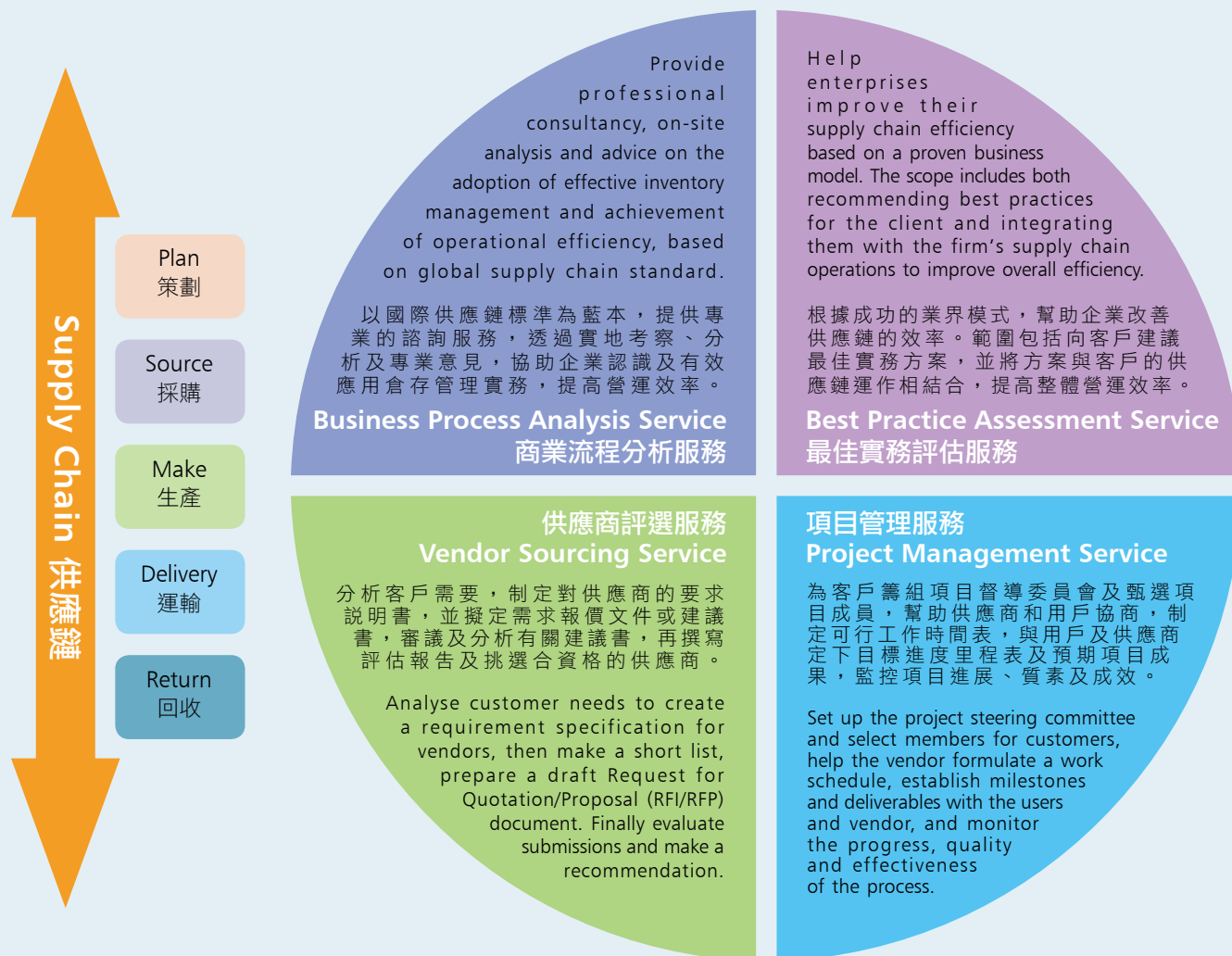


## How GS1 Hong Kong Can Help 香港貨品編碼協會如何協助

### Inventory Management Professional Services 倉存管理專業服務

We offer professional consultancy on inventory management, comprising the following four main services:

我們提供倉存管理的專業諮詢服務。四項主要服務包括：



For more information about the GS1 Hong Kong Inventory Management Professional Services, contact us at 852 2863 9786 or email us at [member.promo@gs1hk.org](mailto:member.promo@gs1hk.org).

如欲索取有關倉存管理專業服務的資料，可致電 852 2863 9786 或電郵 [member.promo@gs1hk.org](mailto:member.promo@gs1hk.org)。

# Asian Movement Gets Under Way to Bring EPC/RFID Standard to Consumer Electronics

## 亞洲區展開行動

## 引入EPC/RFID技術至電子消費品



An industry-wide initiative on RFID standards in Asia was kicked off when the first meeting of the Consumer Electronics Discussion Group was held in Tokyo, Japan, October 5-6. More than 20 leading companies from the consumer electronics industry gathered to discuss the EPCglobal community's principles and organization and contribute to the development process of global RFID standards for consumer electronics. Over 40 delegates attended the meeting sponsored by the Japan Consumer Electronics RFID Consortium, an industry union formed by leading Japanese consumer electronics companies such as Sony, Hitachi, NEC, Sharp and Fujitsu.

The first meeting of the Consumer Electronics Discussion Group was held in Tokyo, Japan, October 5-6.

2006年10月5至6日，首個電子消費品研討小組會議在日本東京召開。

2006年10月5至6日，首個電子消費品研討小組會議在日本東京召開，亦正式為電子消費品行業引入EPC/RFID技術揭開序幕。參與是次會議的成員包括來自超過20家經營電子消費

品的主要企業代表。各與會代表於會議中商討有關EPCglobal的原則和其組織架構，投身參與制定RFID環球標準之過程。是次會議由Sony、Hitachi、NEC、Sharp及Fujitsu組成的日本消費電子產品RFID聯盟(Japan Consumer Electronics RFID Consortium)所贊助舉行，逾40位代表出席。



## Asia manufacturing for global markets

Consumer electronics items tend to be of a high average value compared to fast moving consumer goods, and require more secure handling in the supply chain. Consumer electronics supply chains can also be geographically dispersed, with a high proportion of goods manufactured in Asia for global markets. A smooth passage through logistics is essential for cost competitiveness and customer service. Recovery time from errors is also extended compared to single market supply chains, so logistics performance is a key to customer retention.

## Industry seeks consensus standards for better traceability

Increasingly, the brand owners of globally marketed consumer electronics products are located in Asia, especially Japan and Korea. The formation of EPCglobal's Consumer Electronics Discussion Group reflects the need for Asian industrialists and retailers to collaborate to contribute to the development of RFID standards for consumer electronics products.

Over the last three months, major players from the consumer electronics sector have agreed to form a consumer electronics discussion group and collaborated in a series of initial discovery meetings held in Hong Kong, Japan and Singapore last June - August. In future, the group can go on to define and develop EPCglobal standards to meet the needs of the industry. Although the early meetings have focused on Asia, this is a global industry and the intent is to expand the scope of the initiative to all regions.

The objective of the discussion group process is to confirm the viability of embarking upon the standards development process and to focus on determining the initial focus areas, based upon the industry's perceived needs, and the work group structure needed to cover those areas.

## 亞洲製造 環球市場

由於電子消費品的平均價值較快速流轉消費品的為高，所以更需要確保其供應鏈流程的安全性。雖然電子消費品供應鏈分佈在全球不同的地域，但大部份的產品是於亞洲區製造並供應給全球市場。要有效控制成本及提供優良客戶服務，一個順暢的物流程序是不可或缺的重要部分。另外，一旦遇上貨件傳送的錯誤，地域分散的供應鏈較單一市場供應鏈需要更長的時間更正錯誤。故此，高效率的物流處理程序，是保留顧客的關鍵要素。

## 業界尋求共同追蹤產品標準

近年，越來越多行銷全球的電子消費品牌由亞洲的企業集團經營，尤其是日本和韓國。成立EPCglobal電子消費品研討小組，正好反映出亞洲的製造商與零售商為電子消費品共同協作發展RFID標準的需要。

過去三個月，數家大型電子消費品企業同意籌組成立電子消費品研討小組，並於去年6月至8月期間在香港、日本及新加坡等地合作舉行了一系列初步的研討會。研討小組將於未來逐步擬出切合業界要求的EPCglobal標準。雖然這些會議最初是集中在亞洲區舉行，但由於電子消費品是一個全球性的行業，所以該小組打算將來逐步將這個議案推廣至全球其他地區。

業界舉行研討小組會議的目標，主要是確認是否可行展開一個發展業界標準之程序，並且按行業的客觀需要定出優先處理的範疇，以及制定出處理這些範疇的組織架構。



In Japan, the group's scope was defined as: "Any electronics sold directly to an end user through the retail system," which includes TVs, music centres, microwaves, computer gaming machines and radios.

The scope of the Consumer Electronics Discussion Group also includes the complete supply chain, from raw materials through manufacturing, logistics, distribution, retail, returns, warranty service, after sales service and final disposal of the item under any relevant regulations. Another discussion group meeting took place on December 7-8 in Korea. Over 70 delegates from the region joined the meeting and made a further step forward by forming a task force focusing on how to enhance reverse logistics as well as the consumer electronics supply chain process with EPC/RFID technology.

Another discussion group meeting took place on December 7-8 in Korea.

另一次研討小組會議則於2006年12月7至8日在韓國舉行。

在日本舉行的首次研討小組會議中，小組擬定出電子消費品的產品定義是：“任何透過零售體系直接銷售給終端用戶的電子產品”，這包括電視、音樂處理器、微波爐、電腦遊戲機及收音機。

此外，電子消費品研討小組的討論範圍涉及整個供應鏈，包括從上游廠製造原料、物流處理程序、分銷、零售、退回、保用服務、售後服務，以至最終按相關法例處置產品。另一次研討小組會議則於2006年12月7至8日在韓國舉行，超過70位來自區內的代表參與是次會議，並進展至成

立一個專責小組，專門研究如何利用EPC/RFID技術加強逆向物流及提高電子消費品供應鏈程序的效率。

## How an industry Discussion Group adds value

Discussion Groups are meetings of both EPCglobal members and non-members from an industry sector, who discuss their needs regarding any aspect of article numbering and related technologies. A Discussion Group may become an EPCglobal Industry Action Group to develop global standards. Industry Action Groups have already been set up for fast moving consumer goods, healthcare and life sciences, transportation and logistics, apparel, fashion and footwear, and EPC standard hardware and software. Other initiatives are under way for the chemical, automotive and aerospace industries as well.

Participation in discussion groups and collaborating with global supply chain counterparts ensures that the issues and needs of an organization and a particular sector are accommodated by the EPCglobal Network™. The EPCglobal Network combines standards-based numbering systems with RFID and Internet technologies to enable the secured collection and communication of real time product movement data about individual items within the supply chain.

## 研討小組如何為業界增值

無論是EPCglobal成員和非成員均可一起參與其所屬行業的研討小組會議，共同討論他們對產品編碼及相關技術的各種需要。行業研討小組更可進一步發展成為EPCglobal業界工作組，共商如何制定全球行業標準。目前，快速流轉消費品、醫療和生命科技、交通和物流、成衣、時裝和鞋履以及EPC標準軟件和硬件等行業，都已經成立了業界工作組。化學、汽車及航空等行業現正在籌備相關的研討小組。

由於EPCglobal網絡結合標準化的編碼系統、RFID及互聯網技術，供應鏈中個別貨件的實時數據流向可以準確地收集及傳送。不同行業的業界成員透過參與行業研討小組，與全球供應鏈上的不同夥伴合作，便可以確保EPCglobal 網絡能夠切合不同機構及行業的應用及需要。

## Feasibility of using EPC/RFID to handle product recall 利用EPC/RFID處理產品回收的可行性

Because consumer electronics products are manufactured in high volume and often sold to the general public, occurrence of defects which may sometimes be dangerous is unavoidable. A product recall, for example, laptop computer lithium-ion battery packs could be very costly. As such, tagging on computer batteries is on the agenda of the Consumer Electronics Discussion Group. The Group believes standard-based information could enhance traceability in these cases, enabling items for recall to be identified from retail point of sales computer records.

由於電子消費品是大批量製造及發售，當中難免遇到回收問題，且產品事故可能對公眾構成一定的危險。而一次的产品回收，例如回收手提電腦鋰離子電池包，可以涉及非常高昂的代價。故此，電子消費品研討小組於會議議程中，加入為電腦電池標籤這個議題。研討小組認為一旦為電子消費品制定了標準化的訊息，日後需要進行產品回收時，也會較容易進行產品追蹤以及可從零售銷售點的電腦數據紀錄中識別需被回收產品的資料。

# Thinking Big with Reduced Space Symbology Bar Codes

## 嶄新縮減空間碼內含乾坤



The size may be small, but the ambition behind the Reduced Space Symbology (RSS) bar code is big. RSS symbols are new bar codes, which can store more data yet occupy less space than existing bar codes using EAN/UPC symbology. In today's market, the growing sophistication of IT technology and management systems has led to demands for additional information to be carried by GS1 bar code symbols. RSS is the response to this industry need.

### What can RSS do?

RSS enables expanded bar code implementation by identifying small items and carrying more information than the current symbology. It can carry GS1 Application Identifiers like serial numbers, lot numbers, and expiration dates which can better support product authentication and traceability, product quality and effectiveness, variable measure product identification, and couponing.

As RSS is smaller in size, it can provide more space for consumer communication or provide the option to reduce packaging in an effort to reduce the cost of goods.

It will enable GTIN identification for hard-to-mark products like fresh foods increasing shrink reduction and improving category management. It can also provide an alternative to the current "small symbol" options where numbering capacity may be an issue in some markets.

RSS is able to provide automatic identification data. As a result, it can provide retailers with greater visibility and accuracy about what they are selling and in which quantities.

**RSS will enable GTIN identification for hard-to-mark products like fresh foods.**

**RSS令一些難以註標的產品，如新鮮食品等，都可採用國際貿易貨品編碼(GTIN)識別。**

個子雖少，卻雄心萬丈，這正好用來形容即將全面推行的縮減空間碼(Reduced Space Symbology，簡稱RSS)。RSS所佔的應用空間雖然較現時適用的EAN/UPC條碼細小，但可儲存更多數據。現今市場資訊科技及管理系統日益精確，提升了業界對GS1條碼需要儲存更多資料的要求，而RSS正好配合這業界需求而應運而生。

### RSS具備那些功能？

RSS能夠識別細小物品，而且比現時的條碼可儲存更多資料，擴大了條碼的應用範圍。RSS具有儲存GS1應用識別碼，如序號、批號及有效日期等資料的功能，可以更有效支援產品真偽辨證及產品追蹤，確保產品品質和效能，亦支援不定量貨品的識別以及兌現贈券的程序。

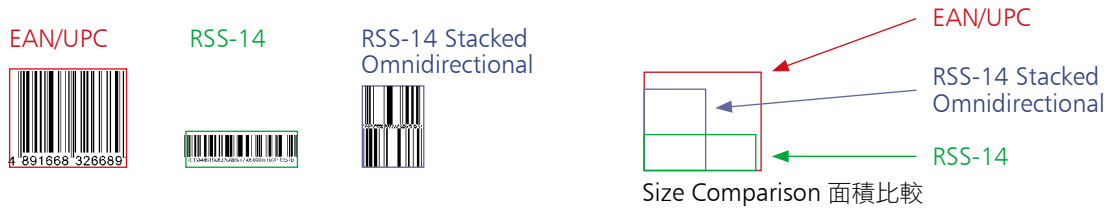
由於RSS面積細小，可以騰出較多產品表面空間，讓製造商可傳遞更多消費資訊或減少產品的包裝體積，節省成本。

RSS亦可以令一些難以註標的產品，如新鮮食品等，都可採用國際貿易貨品編碼(GTIN)識別，為節省空間及分類管理提供全新的支援。此外，亦可作為代替現時在某些市場應用的“短碼”的另一選擇。

RSS能夠提供自動識別數據。憑著這些數據，讓零售商可以更清楚了解產品的特質及數量。



## RSS versus EAN/UPC symbols RSS與EAN/UPC條碼的比較



|                   | RSS                                       | EAN/UPC               |
|-------------------|---|-----------------------|
| Scan Rate 掃描速度    | No time difference 無時間差距                  |                       |
| Carry digits 可載數位 | upto 69 digits (RSS Expanded) 可達69個數字/英文字 | 12/13 digits 12至13個數字 |
| Size 面積           | upto 62% area of saving 可節省達62%應用空間       | —                     |

### Benefits to different sectors

RSS will allow new product types and special applications to be managed more completely or globally. A global task force comprising twenty-six companies, including retailers, fast moving consumer goods manufacturers, pharmaceutical companies, GS1 member organizations, and trade associations documented a compelling business case review, which highlighted implementation issues and detailed a roadmap.

### Fresh foods and farm produce

With its smaller size, RSS will enable Global Trade Item Number (GTIN) identification for hard-to-mark products like fresh foods, increasing shrink reduction and improving category management. RSS can identify serial numbers, lot numbers and expiration dates, which can help trace products to a specific manufacturer and production batch. The inclusion in bar codes of expiration dates for food or other perishable products will facilitate management of stock, protecting product quality and avoiding obsolescent products. Automated mark-down of prices can be implemented as a product approaches its sell-by date, with a stop-sale provision when it is reached. The product authentication should help fight illegally copied goods as well.

Significant reduction in stock shrinkage is expected from use of RSS, due to better management of product expiration dates that helps to avoid loss from expired products and also to increased accuracy of data capture at the Point-of-Sales (POS) by extending bar coding to products such as farm produce.

### Retail

One special application of RSS is in the management of coupons redeemed by customers at the checkout. RSS codes will enable automatic management of coupon

### 對各行業之好處

各行各業將可更全面和全球化地利用RSS來處理新產品種類以及特別的應用範圍。目前，由26個國家的零售商、快速流轉消費品製造商、藥品公司、GS1成員組織及不同行業商會所組成的環球工作小組，已完成了個案檢討報告，當中探討了應用RSS的問題並詳述發展路向。

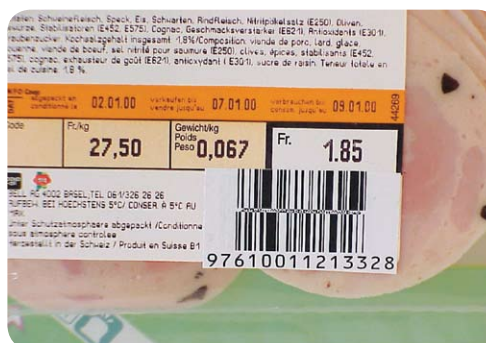
### 新鮮食品及農產品

由於RSS所佔的應用空間很少，因此可以令一些難以註標的產品，如新鮮食品等，都可採用GTIN來識別，從而節省空間及改善食品的分類管理。此外，RSS能識別序號、批號及有效日期，有助追蹤個別製造商及生產批量。在食品或容易變壞產品的條碼內加入有效日期，有助管理存貨，保障產品質素，以及避免因過期而產生報廢貨品。此外，更可預設當產品臨近保質期限時自動調低售價，並於到期日標示停止出售。除此之外，其產品真偽辨證的功能更可協助打擊非法仿製的贗品。

於RSS上加入保質日期，可以更有效管理有期限產品的到期日，避免因產品到期報廢所帶來的損失，減少產品庫存量短缺。此外，亦使銷售點(POS)能夠讀取更精確的數據，擴大RSS的應用範圍至更多產品例如農產品等。

### 零售

RSS其中一個特別的應用範圍，是用來管理顧客於付款台兌現贈券的程序。利用RSS可以自動處理贈券到期日，減省在零售銷售點輸入數據的程序，為收款員及顧客節省時間。



expiration dates, and a reduction in the data entries needed at the retail POS, reducing processing time for cashiers and customers.

For books, two bar codes - International Standard Book Number (ISBN) and EAN/UPC symbology bar code are currently used in many markets, and their replacement by a single RSS bar code will increase checkout speed.

## Pharmaceuticals and cosmetics

The small size of the RSS bar code will provide advantages on small products, such as pharmaceuticals and cosmetics, or products with unusually shaped packaging, where space is at a premium. The same applies to multi-lingual labelling, which allows a stock-keeping-unit (SKU) to be sold in several countries, especially in Europe.

## Potentials of RSS

In recent decades, the existing bar codes using EAN/UPC symbology have provided the industry with a solid foundation for the high return on investment (ROI) associated with stock keeping unit management systems. RSS bar coding will provide the industry with a new ROI foundation that goes beyond singularities to management systems associated with a multiplicity of SKU attributes including traceability, product authentication, and category management.

## How we prepare for RSS

GS1 has announced 1st January 2010 as a target date for the global adoption of RSS for any trade item. The adoption date of 2010 sets the goal for bar code systems to be capable of scanning RSS bar codes and processing GS1 Application Identifiers. In 2007, GS1 will publish the implementation guidelines to facilitate market adoption. Initial priorities were established for identification of fresh food, variable measure items, and pharmaceutical products sold at retail. In Hong Kong, GS1 Hong Kong has formed a work group to study the adoption of RSS and will start to develop an implementation plan based on the implementation guidelines for RSS to be issued by GS1 in the first half of 2007. For more information, contact us at 852 2863 9737 or email us at [info@gs1hk.org](mailto:info@gs1hk.org).



現時在很多市場，書籍都印有兩組條碼 - 國際標準書號 (ISBN) 及 EAN/UPC 條碼。若以單一的 RSS 代替，便可以節省付款的時間。

## 藥物及化妝品

只佔細小應用空間的 RSS，有利用於表面可用空間較少的產品，例如體積細小的藥物及化妝品，以及包裝外形特別不規則的產品。同樣，RSS 適用於需要多種語言註標的產品，讓每一個存貨單位 (SKU) 的貨品可以同時在多語系的國家如歐洲等市場內行銷。

## RSS的發展潛力

過去數十年，EAN/UPC 條碼一直為存貨單位管理系統概念帶來高投資回報，為業界建立了穩固的基礎。由於 RSS 能夠為單一的存貨單位帶來多種功能，包括產品追蹤、辨證產品真偽，以及分類管理，預期這將可為業界的投資回報基礎揭開新一頁。

## 如何為推行RSS作好準備

GS1 總部已經宣佈將 2010 年 1 月 1 日定為目標日，於全球所有貿易商品上採用 RSS。要於 2010 年達到這目標，屆時，條碼閱讀器必須能夠支援掃描 RSS 及處理 GS1 應用識別碼。GS1 將於

2007 年內公布關於實行 RSS 的不同指引。而 RSS 的應用，將首先在識別新鮮食品、不定量貨品，以及零售藥品上推行。在香港方面，香港貨品編碼協會已成立工作小組研究推行 RSS 的程序，並將按 GS1 即將於 2007 年上半年公佈的執行指引來定出執行計劃。如欲索取有

關 RSS 的資料，可致電 852 2863 9737 或電郵 [info@gs1hk.org](mailto:info@gs1hk.org)。

## Uniqueness of RSS RSS的獨特之處

- Ability to trace a specific manufacturer and production batch
- Traceability by expiration dates of food and perishable products to protect product quality
- Better management of product recalls
- Feasibility of applying bar codes on irregular shaped products, such as curved or spherical surfaces
- 可追蹤個別製造商及生產批量
- 可加入有效日期，追蹤食品及容易變壞產品來保障產品品質
- 可更有效管理產品回收程序
- 可應用於形狀不規則的產品上，例如弧形或球形表面的產品

# Supply Chain Maturity Reference Model Tailors SCM Best Practice for SMEs

## 供應鏈成熟水平參考模型 為中小企度身訂造



Many SMEs need to lower their production costs to stay competitive and a supply chain maturity model can help them engineer their operational processes so as to improve the management of operations such as inventory and warehouse to achieve cost reduction. The most widely used model, SCOR, has been adopted by hundreds of large multinationals, but SMEs, with their small size and operational scale, cannot easily benefit from it as SCOR requires companies to reach a certain maturity level in the supply chain process.

To bridge this gap, we have plans to develop a Supply Chain Maturity Reference Model (SCMRM). The purpose of the Maturity Model is to assess SMEs' readiness for the adoption of proven supply chain models, especially the Supply Chain Council's Supply Chain Operations Reference-model (SCOR), and to become a roadmap for supply chain process improvements. The project is currently under review by the Hong Kong SAR Government's Trade and Industry Department for the SME Development Fund. The project is expected to roll out in 2007, subject to the funding approval.

The purpose of the Maturity Model is to assess SMEs' readiness for the adoption of proven supply chain models.

目的是要評估中小企是否對於採用先進的供應鏈模型準備就緒。

很多中小型企業為了維持競爭力，均需要減少生產成本。而採用一個成熟的供應鏈模型，能夠幫助這些企業重組營運流程，從而改善存貨及倉庫管理等運作程序，協助降低成本。現時廣為大型跨國企業採用的供應鏈模型是SCOR，

即(Supply Chain Operations Reference-model) (供應鏈運作參考模型，簡稱SCOR)。由於SCOR較適合供應鏈流程達至一定的成熟程度的公司，故此，規模較小的中小企難以從中得益。

為了協助中小企銜接和過渡至採用SCOR，我們正在計劃發展SCMRM，

即(Supply Chain Maturity Reference Model) (供應鏈成熟水平參考模型，簡稱SCMRM)，目的是要評估中小企是否對於採用先進的供應鏈模型準備就緒，尤其是由供應鏈管理委員會制定的SCOR，然後再根據評估的結果，為需改善之供應鏈流程部份擬定指引。此計劃正交由香港特區政府工業貿易署審核批出中小企業發展支援基金。如獲工業貿易署批准撥款，我們計劃於2007年內推行這個項目。



## Benefits to SMEs

Many SMEs in Hong Kong have achieved only basic organization of their inventory, warehouse, orders, assets and logistics management, and they are not able to cope with the supply chain requirements of large companies using advanced models such as SCOR. SCMRM provides step-by-step guidance on managing supply chain operations so that SMEs can immediately begin increasing their efficiency and gradually move towards using computerized systems to control their processes much more accurately, in real-time.

### A ladder to reach advanced process integration

The SCMRM provides a five-level 'ladder' to enable SMEs to improve the management and integration of their operations. The goal is to improve SMEs operations by providing guidelines and best practice on operations such as inventory and warehouse management, until they can reach maturity level 3, which is the integration level and are able to integrate with the SCOR model adopted by large enterprises.

## 對中小企之好處

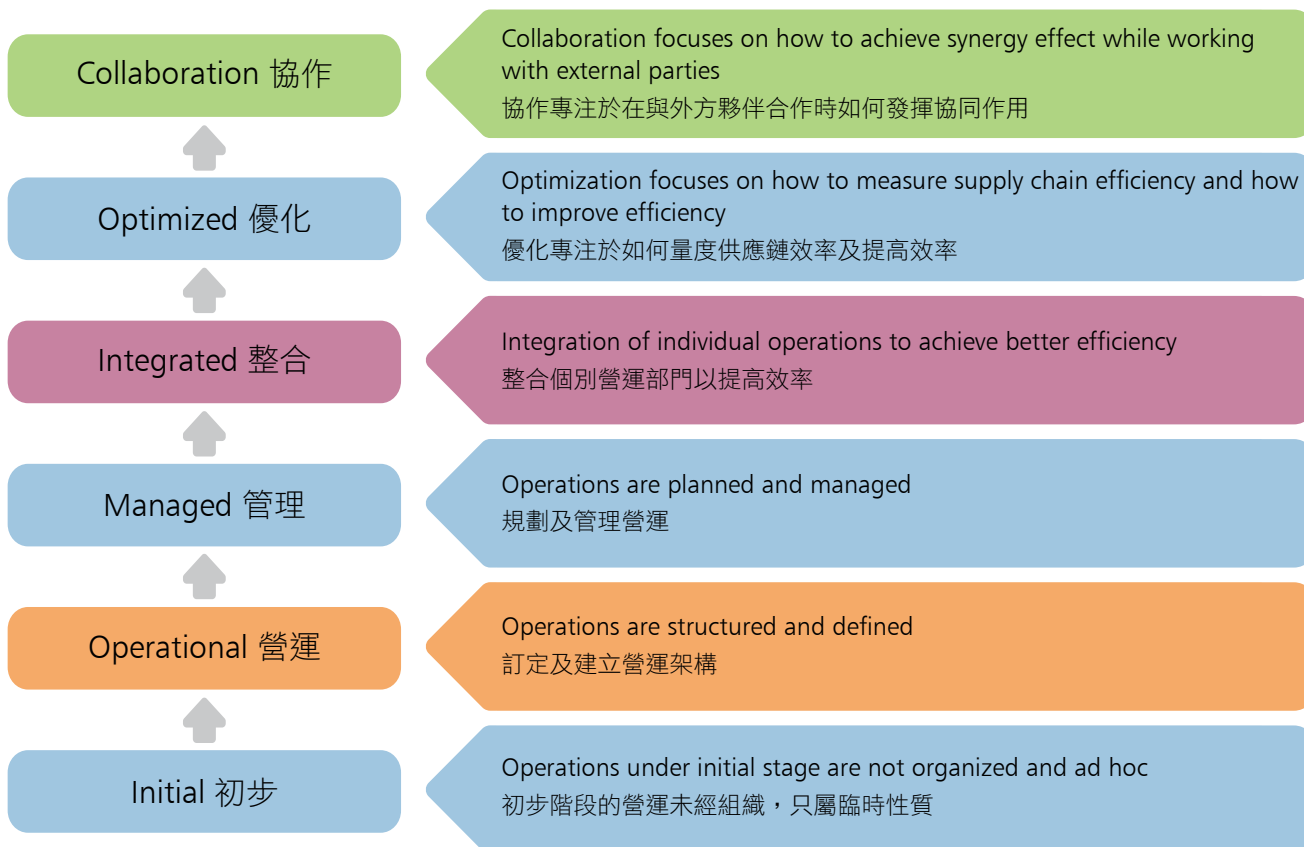
香港很多中小企對存貨、倉庫、訂單、資產及物流管理，都只作出基本安排來應付日常的需要，尚未能達到已採用SCOR等先進模型的大企業所要求的供應鏈水平。SCMRM為供應鏈運作管理提供循序漸進的指引，令中小企可以於短時間內提升效率，並逐步進展至利用電腦系統更精確並且實時的控制流程。

### 引領中小企達成卓越流程整合

SCMRM利用一個五級的“階梯”協助中小企改善與整合營運管理，這五級的方案是首先向中小企提供存貨及倉庫管理等運作的指引和最佳實務，直至他們達至第三級成熟程度，亦即整合級別，然後便可以與大企業採用的SCOR整合。

## Supply Chain Maturity Reference Model 供應鏈成熟水平參考模型

Supply Chain Maturity Reference Model defines a roadmap for SMEs to achieve SCM best practices.  
供應鏈成熟水平參考模型為中小企訂定達到供應鏈管理最佳實務的藍圖。



If local SMEs aspire to do business with those large enterprises, they need to comply with their SCM best practices. The SCMRM roadmap for SMEs to achieve SCM best practices, comprises five levels:

## Level 1

Level one includes SMEs whose operations are informally managed and may not be computerized. This level is the operational level that aims to define all the applications required, including inventory and warehouse management, order processing, asset management and logistics.

## Level 2

Level two considers the planning and monitoring of the same applications, using either computerized applications or manual methods, such as spreadsheets.

## Level 3

Level three begins to use SCOR as the reference model, with the integration of individual applications and also the mapping of the process functions to those in SCOR.

## Level 4

Level four is optimization, in which performance indices are established to measure the efficiency of each process, again using SCOR as the reference model. Inefficient processes are re-engineered.

## Level 5

Level five covers collaboration with supply chain partners, in order to achieve added efficiency through synergy, including the development of standards, compliance and validation.

若本地中小企打算與大企業進行業務往來，必須符合大企業所採用的供應鏈管理最佳實務。要達到這要求，中小企可按 SCMRM 的五個級別進行：

## 第一級

第一級涵蓋未有正規管理營運架構，或未有進行電腦化的中小企。這個級別屬於營運級別，主要確定應用範圍，包括倉存及倉庫管理、訂貨程序、資產管理及物流。

## 第二級

第二級是利用電腦系統或以人手方式（如利用表格）策劃和監察上述範圍。

## 第三級

第三級開始利用 SCOR 作為參考模式來整合個別應用範圍，以及將其程序功能與 SCOR 的相對照。

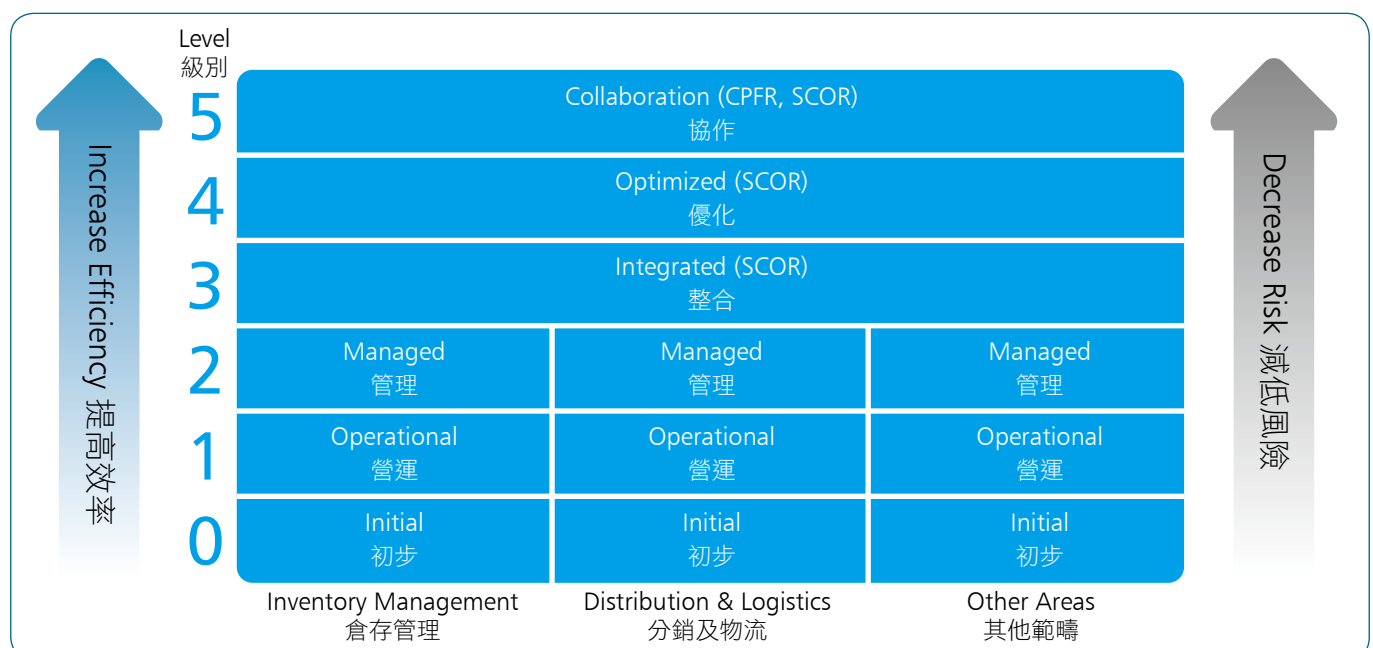
## 第四級

第四級是優化程序。這個級別是要設立表現指標，同樣以 SCOR 作為參考模式，用以量度每個程序的效率。低效率的程序會被重新設計。

## 第五級

第五級納入與供應鏈夥伴合作的基調，借助協同效應增加效率，包括訂立標準，跟隨標準以及確認標準。

## OVERVIEW OF SCMRM SCMRM 概覽



## An easy-to-adopt model

As SMEs grow, they may need to re-engineer their existing supply chain operations to meet the international model of best practice. To avoid this, they should try to adopt best practice at the beginning, and this is where SCMRM can help them. Benefits include the ability of the SCMRM to help SMEs start in the right way from the beginning. SMEs can choose the maturity level and the operational area that they are interested in.

## Comprehensive package facilitates the conception

A program will be developed to facilitate the conception of the SCMRM. SMEs participating in the SCMRM program will obtain a comprehensive package for implementation, including:

- Web-based self-assessment system for SMEs to determine their maturity level and identify areas where improvement is needed. A group of SMEs will be invited to participate in this self-assessment program. The self-assessment system will also be freely available to other SMEs. This will provide them with an indication of how useful the program could be to their company.
- SCMRM training sessions for pilots and seminars.
- Pilot case studies and shared sessions with successful industry players.
- Helpdesk support for enquiries about SCMRM.
- Bilingual SCMRM implementation guidebook.

The SCMRM program comes with implementation guidelines in both English and Chinese to facilitate its adoption.

Another goal of the SCMRM is to support the vision of integration between the Hong Kong and Pearl River Delta manufacturing base by enhancing supply chain responsiveness to global customers. To support this vision, Supply-Chain Council-Greater China will carry out a marketing and promotional campaign to promote the SCMRM and its methodology locally and overseas.

## 易於採用的模式

當中小企持續發展，他們或需要重組現時的供應鏈運作流程，以達到國際最佳實務模式。為了避免這個情況，中小企一開始便應嘗試採用最佳實務，而SCMRM正能夠幫助中小企於開始時便採用正確方法的方案。中小企可以選擇擬參與的成熟級別及營運範圍。

## 全面配套促進認識概念

參與SCMRM計劃的中小企，將獲全面實行SCMRM的配套服務來輔助其實踐這計劃。配套服務範圍包括：

- 為中小企而設的網上自行評估系統，評估其成熟程度及需要改善的範疇。個別中小企將被邀請參加這自我評估計劃，其他的中小企亦可免費自行使用這自我評估系統。這個系統將可讓中小企了解SCMRM計劃是如何有利其公司發展。
- 為SCMRM的試點用戶舉辦培訓課堂及研討會。
- 舉辦試點個案分析及與成功企業分享研討會。
- 提供SCMRM電話查詢支援服務。
- 雙語編制的SCMRM推行指南書。

推行SCMRM計劃的整個配套服務計劃均提供中文及英文版的推行指南書，有助加快本地企業了解和採納。

此外，我們推行SCMRM的另一目的，是為了達至整合香港及珠江三角洲生產基地的理想，從而提高供應鏈回應全球客戶要求的應變能力。為達成這個理想，供應鏈管理委員會（大中華區總會）亦將進行市場宣傳及推廣計劃，以在本地及海外推動SCMRM及其實施方法。





## The RFID Cross Border Feasibility Study Press Conference 無線射頻識別技術的跨境可行性研究新聞發佈會

In September, EPCglobal Hong Kong announced that truck crossing time at the Hong Kong Shenzhen border could be halved through the use of Electronic Product Code™ and Radio Frequency Identification together with a combination of selected technologies, according to an RFID cross-border feasibility study by the Hong Kong University of Science and Technology.

EPCglobal香港於9月舉行新聞發佈會，宣佈由香港科技大學進行的一項無線射頻識別(RFID)技術跨境可行性研究報告。該報告顯示利用產品電子代碼／無線射頻識別(EPC/RFID)技術以及其他輔助技術，可以減省貨車由香港至深圳的過境時間達一半。



## The 6th Annual Supply Chain Management CEO Summit 第六屆供應鏈管理行政總裁會議



On 11 – 12 October, GS1 Hong Kong held the 6th Annual Supply Chain Management CEO Summit under the theme 'Time for Supply Chain Integration'. Over 30 local and international supply chain experts across multiple sectors spoke at the Summit, more than 300 delegates were in attendance and 24 industry-supporting organizations provided support.

香港貨品編碼協會於10月11及12日舉辦「第六屆供應鏈管理行政總裁會議」，今屆的主題為「聯繫夥伴 — 共拓商機」。此次會議邀請了逾30位本地及國際供應鏈專才發表演說，超過300名業界代表出席，並獲24家業界機構的鼎力支持。

## The 8th China Chain Store Expo 第八屆中國連鎖店展覽會

GS1 Hong Kong attended the 8th China Chain Store Expo in Beijing in November 2006. Our participation in the METRO Group's Future Store Initiative at the expo demonstrates GS1 commitment to promoting the use of global supply chain standards and enabling technologies for innovating tomorrow's supply chain.

香港貨品編碼協會於2006年11月出席在北京舉行的「第八屆中國連鎖店展覽會」，參與由麥德龍集團(METRO Group)於展覽會中展示的未來商場計劃(Future Store Initiative)。這次的參與，充分顯示GS1致力向業界推廣採用全球供應鏈標準及應用技術，革新明天的供應鏈。



## The ITU Telecom World 2006 國際電信聯盟2006年世界電信展



Mr. K.K. Suen, Chief Architect & Principal Consultant of GS1 Hong Kong, was honored to be invited as one of the panelists in the forum session "Digital Lifestyles@Work" at ITU Telecom World 2006.

ITU Telecom World 2006, which is regarded as the "Olympics" of the telecommunications industry, was successfully held on 4 - 8 December 2006 at the AsiaWorld-Expo in Hong Kong. It is the most important event of the International Telecommunications Union (ITU) for the worldwide telecom industry. This was the first occasion that the ITU Telecom World 2006 was held outside of Geneva, Switzerland since it was inaugurated in 1971.

At the forum, Mr. Suen shared with other panelists and audiences his insights into how EPC/RFID are making our work-time more efficient. GS1 Hong Kong also provided exhibits in Hong Kong Science & Technology Parks Corporation's show booth.

香港貨品編碼協會總工程師及首席顧問孫國江先生獲邀為嘉賓講者出席國際電信聯盟2006年世界電信展其中一個名為 "Digital Lifestyles@Work" 的論壇。

被電信業界譽為“奧林匹克”的國際電信聯盟2006年世界電信展，於2006年12月4至8日在香港之亞洲國際博覽館成功舉行。世界電信展是國際電信聯盟(ITU)為全球電信業舉辦的一項最重要活動。是次在本港舉行的2006年世界電信展，是自1971年以來，首次在瑞士日內瓦以外地區舉行的世界電信展。

孫先生在論壇上就產品電子代碼／無線射頻識別(EPC/RFID)技術如何提高工作效率這個議題上，與其他與會代表分享其深刻見解。我們並於香港科技園公司的展覽攤位內展示服務品。

## The Annual Members Gathering 2006 2006周年會員晚宴



About 300 members and business partners attended GS1 Hong Kong's Annual Members Gathering 2006 on 8 December 2006. The theme this year was "Innovation for Supply Chain Efficiency and Visibility" and the event highlight was a video showing five case studies of SMEs which were counseled under the "SME Ambassador Program – Inventory Management". The gathering also provided an opportunity to relax and socialize in a friendly atmosphere, with dinner and entertainment.

約300位會員及業務夥伴出席由香港貨品編碼協會於2006年12月8日舉辦的2006周年會員晚宴。今年的晚會以「高效供應鏈 – 一點創意，全面體現」為題。於當晚的活動摘要環節，大會播放受惠於「中小型企業大使計劃 – 倉存管理」的五間中小型企業的個案分享。是次晚會為各會員及其業務夥伴提供了一個聚首暢談的良好機會，讓大家在輕鬆的氣氛下共享美食及各項娛樂節目。

## GS1 Hong Kong Events 香港貨品編碼協會活動

| Events 活動  | Date 日期       | Venue 地點   | Contact Details 聯絡資料  |
|--|---------------|--|---|
| The Supply Chain Innovation Centre Opening Ceremony<br>供應鏈創科中心開幕儀式                               | 01/02/2007    | Hong Kong Science Park<br>香港科學園                        | Tel 電話: (852) 2861 2819<br>Email 電郵: info@scic.org<br>Website 網址: www.scic.org<br><br>Co-Hosts:<br>GS1 Hong Kong<br>The Hong Kong Science & Technology Parks Corporation<br>主辦機構:<br>香港貨品編碼協會<br>香港科技園公司                          |
| International ICT Expo/<br>Hong Kong Electronics Fair (Spring Edition)<br>國際資訊科技博覽/<br>香港春季電子產品展 | 14-17/04/2007 | Hong Kong Convention and Exhibition Centre<br>香港會議展覽中心 | Tel 電話: (852) 2584 4333<br>Email 電郵: exhibitions@tdc.org.hk<br>Website 網址: http://ictexpo.com<br><br>Organizer:<br>Hong Kong Trade Development Council<br>主辦: 香港貿易發展局<br>Supporting organizer:<br>GS1 Hong Kong<br>支持機構: 香港貨品編碼協會 |

## GS1 Hong Kong Training Programs 香港貨品編碼協會培訓課程

| Events 活動  | Date 日期                                | Venue 地點                            | Contact Details 聯絡資料  |
|--|--|-------------------------------------|---|
| EPC/RFID Industry Implementation Forum<br>EPC/RFID業界實踐論壇 | 01/02/2007                             | Hong Kong Science Park<br>香港科學園     | Tel 電話: (852) 2861 9724<br>Email 電郵: florencelo@gs1hk.org     |
| Barcode Workshops<br>條碼工作坊                               | 06/02/2007<br>29/03/2007<br>16/05/2007 | GS1 Hong Kong Office<br>香港貨品編碼協會辦公室 | Tel 電話: (852) 2863 9769<br>Email 電郵: michellecheung@gs1hk.org |
| VAP Seminars<br>供應商夥伴計劃講座                                | 28/02/2007<br>27/03/2007<br>23/05/2007 | GS1 Hong Kong Office<br>香港貨品編碼協會辦公室 | Tel 電話: (852) 2863 9773<br>Email 電郵: florriey@gs1hk.org       |

Remark: This proposed schedule is subject to change.  
按: 以上時間表會因應實際情況而改變。



# Complimentary Member Listing

## 會員名錄

GS1 Hong Kong welcomes the following companies as our new members

香港貨品編碼協會歡迎以下公司成為本會會員

### Sep - Dec 2006

#### APPAREL & ACCESSORIES 成衣及飾物

ALDERTEX (HK) LTD  
ANWAY ENTERPRISES LTD  
BEST REGARDS STUDIO  
C K HAIR INTERNATIONAL LTD  
CLASSICHANCE INTERNATIONAL LTD  
CO-BEST APPAREL HK CO LTD  
COMTECH WATCHES (BRANDS) CO LTD  
CONCORD TRADING DEVELOPMENT CO  
DELTA GLOBAL SOURCING LTD  
EPY (HK) INTERNATIONAL LTD  
EXCELLENT JADE LTD  
GREAT LIGHT LTD  
GUESS? ASIA LTD  
JOYFUL MILES LTD  
K C K GARMENT FTY LTD  
KAI YEE INDUSTRIAL LTD  
KAM HING GLOBAL GARMENT CO LTD  
KENT KNITTERS LTD  
LATITUDE LTD  
LAWS FALCON APPAREL CO LTD  
NAM HUNG HANDBAGS INDUSTRIAL LTD  
NEWPORT INTERNATIONAL CO LTD  
PRIMAVERA PRODUCTION LTD  
SAMMART FASHION CO LTD  
SOUTH ASIA KNITTING FTY LTD  
SWANK INTERNATIONAL OPTICAL CO LTD  
TAKKO INTERNATIONAL LTD  
TRADER LAND LTD  
TREND RESOURCES LTD  
WOOF CO LTD  
WOOT FOONG GARMENTS CO

#### BUSINESS / PROFESSIONAL SERVICES

##### 商業/專業服務

CELESTIAL DIGITAL ENTERTAINMENT LTD  
REASON MUSIC & MEDIA (HK) LTD  
SYBASE HONG KONG LTD  
TIANPING INTERNATIONAL PUBLISHING LTD

#### EQUIPMENT & MACHINERY 器材及機械產品

CANON ELECTRONIC BUSINESS MACHINES (HK) CO LTD  
COILS ELECTRONIC CO LTD  
DONGNAN LTD  
EPSON HONG KONG LTD  
FMP-3 LTD  
FUJI MEDICAL PRODUCTS LTD  
FUNG SHING CO LTD  
GPI IMAGING CO LTD  
GREAT WALL (OPTICAL) PLASTIC WORKS LTD  
ISHOPPO LTD  
MANTECH TECHNOLOGY (HK) LTD  
NEC HONG KONG LTD  
NEUX CORPORATION LTD  
ONKYO CHINA LTD  
QWESTER LTD  
STARVIEW INTERNATIONAL TRADING LTD  
SUPPLY CONSULTANTS LTD  
SYNNEX TECHNOLOGY INTERNATIONAL (HK) LTD  
TANOSHII CO LTD  
TOUCH TECHNOLOGY LTD  
UTOPIAN COMPUTER SYSTEMS LTD  
XPERIENCE HONG KONG LTD

#### FOOD PRODUCTS, BEVERAGES & TOBACCO

##### PRODUCTS 食品、飲料及煙草產品

AMERICAN LIFE SCIENCES (HK) LTD  
ASA PACIFIC (HK) LTD

ASIAN LINKER HOLDINGS LTD  
BAK WUI NUTRITION & PHARMA PRODUCTS LTD  
CHINESESOUP.COM LTD  
CHUN WO TONG GROUP LTD  
CHUNG WAH NOODLE FACTORY  
D Q XIANG FOOD PRODUCTS (HK) LTD  
EVERJOY INTERNATIONAL LTD  
GOLD WORTH TRADING CO  
HAGO LTD  
HEALTHY HOUSE INTERNATIONAL TRADING LTD  
HIP SHING HONG MEDICINE LTD  
HONG FUK TONG (HK) CO LTD  
INWAY DISTRIBUTION CO LTD  
KONG ZHI FAT TRADING CO LTD  
LAM GARDEN SPICE CO  
LAND V LTD  
LING LEE INTERNATIONAL LTD  
LO HONG KA BIRNNESTS WHOLESALE LTD  
LONGWIN GROUP LTD  
LUXUWAYS INVESTMENTS LTD  
MAN KEE SOY SAUCE FOOD CO  
MANY WAY TRADING CO LTD  
MEATY FOODS CO LTD  
MINI (HK) CO LTD  
NAMABLE HEALTH VEGETARIAN FOODS CO LTD  
PHOENIX SHANGHAI TOBACCO LTD  
PINGZHI FOODSTUFF (HK) CO LTD  
PIZZA HUT HONG KONG MANAGEMENT LTD  
QUANTUM HOMOEOPATHY INTERNATIONAL LTD  
TCH CO LTD  
THUNDER CHEER LTD  
VEYRON ENTERPRISE  
WING LEE LUNG TRADING CO LTD

#### HOUSEHOLD GOODS 家庭用品

AIRLUX LTD  
ALPHA TOOL COM HK LTD  
APEX CAPITAL LTD  
ASIA COMBINE (HK) CO LTD  
ASINDO CHINA NETWORK LTD  
B2B-ASIA LTD  
BBK ELECTRONICS CORPORATION LTD  
BEST HOPEFUL INDUSTRIAL DEVELOPMENT LTD  
BONDIBON CREATURES CO LTD  
BRATTYMARY LTD  
CARRIER HONG KONG LTD  
CARTABON INDUSTRIES LTD  
CHINA H&L INTERNATIONAL DEVELOPMENT CO LTD  
CHU KWUN KEE METAL MFY LTD  
CREATA (HK) LTD  
CREATIVE FOODSERVICE & PACKAGING LTD  
CULINARY CONCEPTS LTD  
CUTEZONE LTD  
DEKKO TOYS CO LTD  
ELITE PORT LTD  
ENTERBAY LTD  
EXPRESS LINK HOLDINGS LTD  
FUN WORLD (ASIA) LTD  
GRANDEX INTERNATIONAL DEVELOPMENT LTD  
GRUPO TRANS-CONTINENTAL LTD  
GSL LTD  
ICHI TECHNOLOGY LTD  
ILINKO LTD  
ITALY ARSTO GROUP HOLDING (HK) CO LTD  
KELVIN ELECTRIC TRADING CO LTD  
KNOLLSON (HK) LTD  
KOUWA (HK) LTD  
LG ELECTRONICS HK LTD

LILLYLIN LTD  
LINEN HOUSE INTERNATIONAL LTD  
MASINDO (HK) LTD  
NOVA INTERNATIONAL CO LTD  
OHO INTERNATIONAL INVESTMENT CO LTD  
ORIENTAL GREETING INC CO LTD  
ORTIKGA LTD  
OUTDOOR INNOVATIONS (HK) LTD  
PACIFIC GEAR INTERNATIONAL LTD  
PET 1 INTERNATIONAL HOLDINGS LTD  
PETER FISH (HK) LTD  
PHOS TRADING CO LTD  
QUALTECH GLOBAL LTD  
RRR CO (ASIA) LTD  
SEDNA ADVANCED ELECTRONICS LTD  
SIMPLE THINGS IN LIFE LTD  
SKILLS CORPORATION LTD  
SKY CHAIN TRADING LTD  
SKYMATE INTERNATIONAL LTD  
SNOWMEN NEOGIFT ENTERPRISES LTD  
SUNRISE INTERNATIONAL CORPORATION LTD  
SUPRA TECHNOLOGIES LTD  
TRAVELER HONG KONG CO LTD  
TRENDS LTD  
UNEXPECTED ELEPHANT  
UNIQUE CREATION MARKETING LTD  
UNISTAR (ASIA) LTD  
VISION TOYS (HK) LTD  
VTECH ELECTRONICS (HK) LTD  
WAIPHON (CHINA) LTD  
WO KEE HONG LTD

#### LIGHT INDUSTRIAL 輕工業產品

CHAMCO CHEMICAL CO LTD  
CITI-TALENT LTD  
GROTTO DESIGN CREATIONS LTD  
HONG KONG FOCUS TRADING CO LTD  
KA WAH PLASTIC INDUSTRIAL CO  
LEGEND PACIFIC INTERNATIONAL LTD  
PROWERK ASIA LTD  
THE PEDAGOGS LTD  
TOPTYPE PLASTIC PRODUCTS (HK) CO  
TRENDESIGN STUDIO LTD

#### RAW MATERIALS, METAL & CHEMICAL PRODUCTS

##### 原料、金屬及化學產品

ANDROMEDA AROMA LTD  
ASIALINK ORGANIMATE LTD  
ASTAR INVESTMENT LTD  
AURORA WORLDWIDE LTD  
FUNG WAH (HK) CO  
H G KAILEY & CO LTD  
HONG KONG SUNRISING GROUP CO LTD  
HONG KONG WEIQIAN COSMETIC HOLDINGS LTD  
JIREH CHEMICAL LTD  
MIZY ASIA CO LTD  
OLIVE GROUP (HK) LTD  
PA CARE CO LTD  
SARA LEE HONG KONG LTD  
SINGAPORE HEADWAY MEDICINE CO  
SKY CENTRAL HOLDINGS LTD  
SKYLIGHT PHARMACEUTICAL CO LTD  
SOUTH KOREA XOER (INT'L) GROUP LTD  
TACK FUNG MEDICAL SUPPLIES CO  
TAKBO LTD  
YING SING TRADING CO  
YOUNG BEST INTERNATIONAL LTD  
YUK SHING HON CORPORATION LTD

To contact GS1 Hong Kong members, please visit the "GS1 Global Membership Directory" on our website at [www.gs1hk.org](http://www.gs1hk.org)

欲聯絡本會會員，請登入本會網站 [www.gs1hk.org](http://www.gs1hk.org) 之「GS1全球會員名錄」





**GS1 Hong Kong 香港貨品編碼協會**

22/F, OTB Building, 160 Gloucester Road, Wanchai, Hong Kong  
香港灣仔告士打道160號海外信託銀行大廈22樓

Tel 電話 : (852) 2861 2819

Fax 傳真 : (852) 2861 2423

Email 電郵 : [info@gs1hk.org](mailto:info@gs1hk.org)

Website 網址 : [www.gs1hk.org](http://www.gs1hk.org)